REMARKS

Status of Claims

Claims 1-22, 24-28, and 30-41 are pending in the present application. In the above amendments, claims 1, 7, 17, 18, 21, 22, 27, 34, 36, 38, 39, and 41 have been amended. Claims 1, 7, 14, 19, 22, 27, 32, 34, 36, and 39 are the independent claims of the application.

Specification Amendments

Minor clerical errors have been corrected in paragraphs [1032] and [1037] of the specification.

Applicants believe that the specification amendments do not make any substantive changes or introduce new matter into the specification, but are supported by the specification as originally filed.

Allowable Subject Matter

Applicants and their legal counsel gratefully acknowledge the notification of allowable subject matter in claims 6, 12, and 13.

Art Rejections

The Office Action rejected claims 1-5 and 7-11 under 35 U.S.C. § 102(b) as being anticipated by Rich, U.S. Patent Number 5,940,452 ("Rich" in this document). The Office Action further rejected claims 14-41 under 35 U.S.C. § 103(a) as being unpatentable over Rich in view of Willey, U.S. Patent Number 6,505,058 ("Willey").

Applicants respectfully respond to this Office Action.

Support for amendments in claims 1 and 7 may be found in the specification, for example, in paragraphs [1026] and [1028]. Amended claims 22 and 27 incorporate limitations of claims 23 and 29, respectively.

Independent claim 1 recites "a receiver, including a plurality of receiver chains," and "a control system for controlling receive diversity of said receiver by selecting a number of said plurality of receiver chains." In particular, the Office Action cited controller 108 and receiver

apparatus 704 in Figure 7, and text at column 22, lines 49-55. In the cited text, however, Rich discloses that

> The switch 708 also receives a control signal at line 722 from the controller 108. The control signal 722 controls whether the demodulated signal at line 140 from the first receiver 126 or the demodulated signal at line 714 from the second receiver 706 is routed to the controller at line 724. Therefore, in operation the controller 108 controls the selection diversity receiver apparatus 704 responsive to the ratio of Ec/Io, the ∫RSSI, or both the ratio of Ec/Io and the ∫RSSI.

Rich, col. 22, lines 47-54 (emphasis added). Therefore, either the demodulated signal from the first receiver 126 or the demodulated signal from the second receiver 706 is routed to the controller 108 and thus selected. Assuming that each of the receivers 126 and 706 represents a receiver chain, the number of the selected chains remains the same: one. Either the chain in the receiver 126 or the chain in the receiver 706 is selected. Note further that the switch 708 is depicted as a single-pole, single-throw switch with two positions for selecting one of the receivers 126/706. See also the text at column 22, line 65 through column 23, line 4; and text at column 23, lines 19-23. The number of receiver chains in Rich's radio system 700 illustrated in Figure 7 therefore is not selected and does not change.

In the remainder of that document, Rich also fails to disclose "a control system for controlling receive diversity of said receiver by selecting a number of said plurality of receiver chains." The apparatus shown in Figure 1 is a switched antenna diversity apparatus with a single receiver 126. Rich, col. 4, lines 20-31; *id.* Fig. 1. The controller 108 of this embodiment "selectively couples one of only the first antenna to the receiver, only the second antenna to the receiver, and both the first antenna and the second antenna to the receiver responsive to a received signal generated by the receiver." Rich, col. 4, lines 26-30; see also *id.* col. 7, line 65 through col. 8, line 3; *id.* col. 9, lines 19-36; *id.* col. 10, lines 1-13; *id.* col. 11, lines 4-9; col. 13, lines 17-20; *id.* col. 20, lines 27-37; *id.* Fig. 2, steps 206, 210, and 212; and *id.* Fig. 6, steps 602, 608, 616, and 622. In Figure 1, Rich discloses changing the number of antennae, not the number of receiver chains. Even assuming that the receiver 126 represents a receiver chain, Rich does not disclose more than a single receiver chain in this embodiment.

Regarding the embodiments of Figures 8, 9, and 10, Rich states that the diversity receiver may be a switched antenna diversity receiver or a selection diversity receiver, described in relation to Rich's Figures 1 and 7. Rich, col. 25, lines 18-27; *id.* col. 27, lines 48-53; and *id.* col. 28, lines 33-40. As discussed above, Rich does not disclose selecting the number of receiver chains in either the apparatus of Figure 1 or the apparatus of Figure 7. Rich also states that the diversity receiver 812 of Figures 8-10 may be a maximal ratio combining diversity (MRCD) receiver, such as described in Rich's background section. Rich, col. 25, lines 28-32; *id.* col. 27, lines 48-53; and *id.* col. 28, lines 33-40. Rich does not disclose selecting the number of receiver chains in an MRCD receiver, or changing the number of receiver chains based on a determined channel condition.

The embodiment illustrated in Figure 11 of Rich is a switched antenna apparatus. Rich, col. 29, lines 12-14. Rich shows this apparatus as having a single receiver 126. Even assuming that the receiver 126 represents a receiver chain, Rich does not disclose more than a single receiver chain in the apparatus of Figure 11.

Applicants respectfully submit that Rich does not anticipate independent claim 1 at least because Rich fails to disclose controlling receive diversity by selecting a number of receiver chains based on a determined channel condition.

Independent claim 7 recites limitations similar to those discussed above in relation to claim 1. Applicants respectfully submit that Rich fails to anticipate claim 7 at least for the same reasons as apply to claim 1.

In rejecting independent claims 14, 19, 22, 27, 32, 34, 36, and 39, the Office Action asserted that Rich discloses all the limitations of these claims, save for determining a data bit. Each of these claims now recites limitations similar to those discussed above in relation to claim 1, such as determining receive diversity based on a channel condition. As discussed above in relation to claim 1, Rich does not disclose or suggest these limitations. Willey also fails to teach or suggest these limitations. (The Office Action does not assert that Willey teaches or suggests these limitations.) At least for these reasons, Applicants respectfully submit that claims 14, 19, 22, 27, 32, 34, 36, and 39 are patentable over Rich and Willey.

Dependent claims 5 and 11 recite "adjusting a delta threshold corresponding to a difference between said first and second channel condition thresholds based on a mobility level

of said receiver." In rejecting claim 5 as being anticipated by Rich, the Office Action asserted that "Rich's system is capable of being configured" in a certain way. Whether or not Rich's system is capable of being configured in a way specified by claims 5 and 11 is irrelevant to a rejection under section 102.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the . . . claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989). (Both *Verdegaal* and *Richardson* cases are quoted with approval in MPEP § 2131.)

Rich does not positively or inherently disclose the configuration of claims 5 and 11, and therefore does not disclose the "identical invention" claimed.

At least for these reason, dependent claims 5 and 11 are separately patentable over Rich.

REQUEST FOR ALLOWANCE

In view of the foregoing, Applicants submit that all pending claims in the application are patentable. Accordingly, reconsideration and allowance of this application are earnestly solicited. Should any issues remain unresolved, the Examiner is encouraged to telephone the undersigned at the number provided below.

Respectfully submitted,

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